

## **Abstract**

The present invention relates to an electrode catheter for defibrillation, mapping or ablation of cardiac tissue. Said catheter comprises a terminal (40) on the proximal end of the electrode catheter and one or more sensing and/or treatment electrodes (14, 16) that are situated on or in the vicinity of the distal end of the electrode catheter, in addition to at least one electric conductor (44, 62), which is used to electrically connect a respective sensing or treatment electrode to the terminal. The electric conductor (44, 62) is composed of carbon and the electrode catheter is configured to be suitable for use as part of magnetic resonance tomography and for connection to electrophysiotherapy equipment. Said catheter comprises at least one defibrillation electrode, or at least one sensing electrode (14, 16) for the recording and evaluation of cardiac tissue potentials, or at least one treatment electrode (14) for delivering high-frequency currents for ablation purposes.